User Guide

OpenCms

Version 4.0

Alexander Kandzior - Dietmar Galle - Ralf Ruf - Dierk Himstedt

date: June 2000, Version 1.1

Table of Contents

1 INTRODUCTION

1.1 What is OpenCms

1.2 The advantages of OpenCms

1.3 Configuring the client

2 PART 1: OPENCMS - THE DEMO

2.1 Editing a web site

2.1.1 Logging in to the system

2.1.2 Creating a new project

2.1.3 Editing page

2.1.4 Working with the HTML editor

2.1.5 Completing the editing phase

2.1.6 Publishing a project

2.2 Creating a new page

3 PART 2: OPENCMS - THE MECHANICS

3.1 The user interface

3.2 View modes

3.3 Working on a project

3.4 Access permissions

3.5 The editor

3.6 Workflow

APPENDIX 1: BROWSER SETTINGS

Remarks

Configuring Microsoft Internet Explorer

Installing ActiveX controls

Configuring Netscape Navigator

1. Introduction

1.1 What is OpenCMS?

OpenCms 4.0 is a Content Management System that is based on Open Source Software. Complex Intranet and Internet web sites are quickly and inexpensively created, maintained and managed.

OpenCms enables you to create complete web sites offline that are published when you're satisfied with the results. An offline project enables several users with different permissions to work on the offline version as a team. OpenCms enables you to easily coordinate users that are writing, designing or managing content. It also enables you to manage the project's workflows.

Once it has been completed and approved, the offline version is published by the project manager. Subsequent modifications and maintenance activities are performed offline. The site is updated by replacing the online files with the files that were modified offline.

1.2 The advantages of OpenCMS

OpenCms is platform independent. The software used to create the web site is installed on a web server and is accessed via the Internet from any location such as your home. Users use their web browser to access OpenCms via the Internet. The combination of their user name and password ensures that their work environment remains protected. All of the web server's software components are based on Java technology.

1.3 Configuring the client

Netscape Navigator or Microsoft Internet Explorer must be installed on the client. Regardless of the browser you choose, its version must be 4.0 or higher. Configuration details for each of the browsers can be found in the Appendix. The OpenCms client is currently optimized for a Windows operating system (95/98/NT) and Microsoft Internet Explorer.

We divided the user guide, which explains how to use the system's most important functions, into two parts: Part 1 consists of a demo that is intended to give you a practical introduction to OpenCms; Part 2 describes the individual functions of OpenCms in more detail.

NOTE: Our explanations are based on the assumption that OpenCms has been successfully installed and is running on your web server or local computer.

2. Part 1: OpenCms - The demo

The following demo is based on a real life scenario and was designed to get you up and running as quickly as possible.

Open your Internet browser and enter http://localhost/servlets/opencms/examples/index.html to access the OpenCms demo site.

The OpenCms demo site start page is displayed. The navigator contains the links to all of the pages. Click on "examples."

The demo page is displayed (Fig. 1). The first part of the demo consists of modifying the page in OpenCms by following the instructions described below.

OpenCms examples template
OpenCms
back
Clock Test
Window Test
Window Test 2
Unterverzeichnis
Welcome to the OpenCms Demo Page
These pages demonstrate the handling with OpenCms templates and subtemplates. See the JavaDocs of the classes in the com.opencms.examples package for more details.
The OpenCms project is an effort to create the first professional - level Open Source Content Management System (CMS). OpenCms allows a company to maintain a website with little or no help by an external agency or internet professional. To achieve this, OpenCms hides the complexity that is still involved when publishing in the Internet. Departments and individual users can thus concentrate on creating the content for the website, and publish it in an easy an intuitive way. This functionality sounds basic, but today software solutions for companies or organizations are very expensive and, because of the lack of common CMS standards, most often highly proprietary. Considered that the internet communication is a very important business factor today, this means a company will be very dependent on the provider of their CMS solution. OpenCms wants to provide an Open Source alternative for companies to these high expensive and proprietary solutions.

Fig. 1: Empty demo page

2.1 Editing a web site

Activate the "Workplace" to edit a page in OpenCms. The "Workplace" is the OpenCms user interface that is used to change, delete an create new pages. The "Workplace" is entirely based on HTML, which is why you don't have to install additional software to run it from your Internet browser.

Enter the following address in your browser to start the "Workplace:" http://localhost/servlets/opencms/system/workplace/action/login.html

2.1.1 Logging into the system

In the login dialog box (Fig. 2), enter "Admin" as the user name and "admin" as the password.

Fig. 2: "Login" dialog box

Logging in automatically opens a new browser window and closes the old one (you will be prompted to confirm this action). You are now in the "Workplace," in the so-called "Explorer" view (Fig. 3). This is where the actual editing starts.

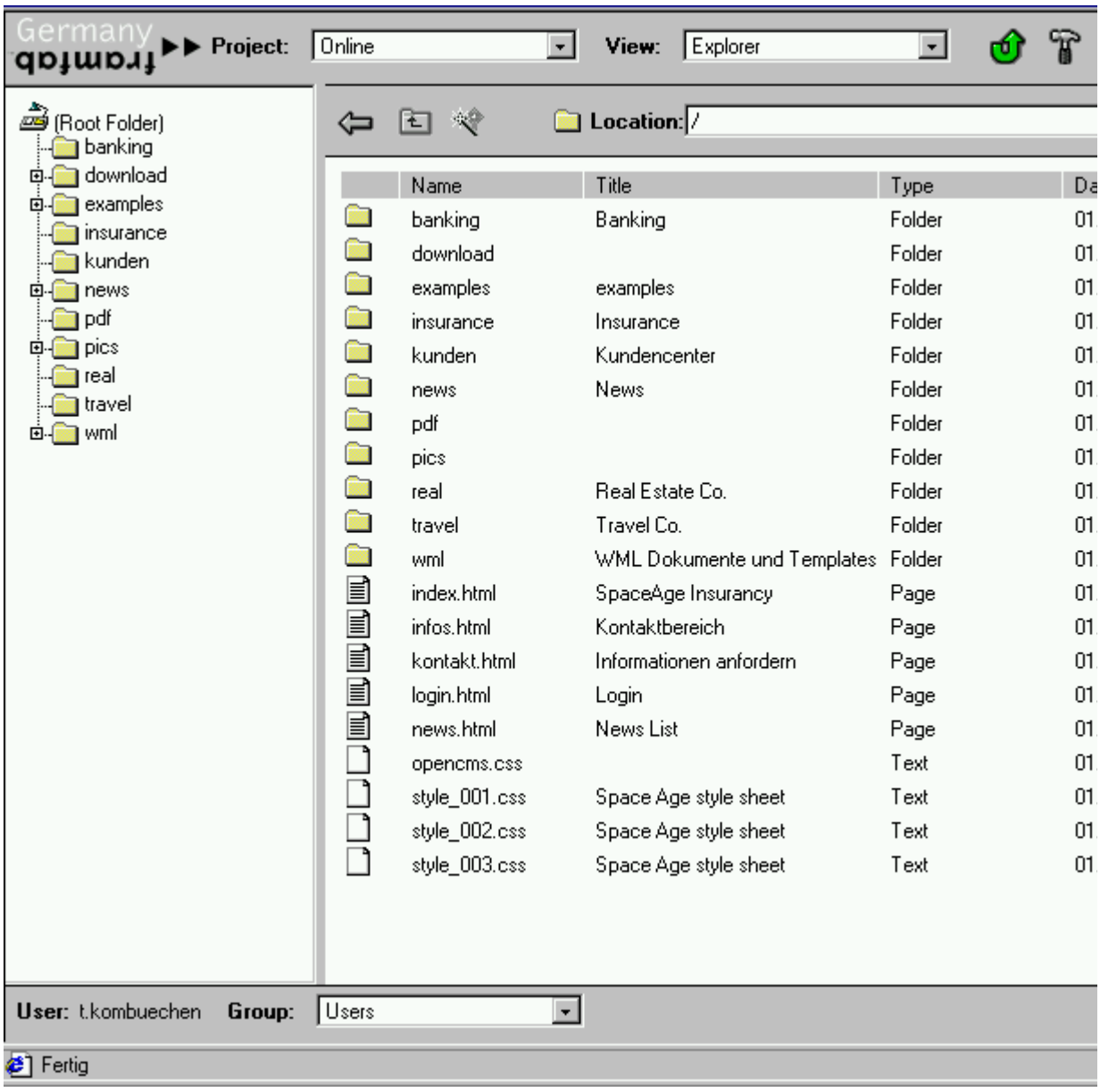


Fig. 3: Explorer view

NOTE: OpenCms is a project based application, which means that you cannot modify the pages online. You first have to create an editing project.

2.1.2 Creating a new project

Switch to the administration window by clicking on "View" on the menu bar and selecting "Administration" from the drop-down menu (Fig. 4).

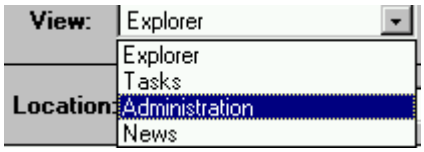


Fig. 4: Drop down menu "View"

The Administration view is opened. The following buttons are displayed: (Fig. 5):

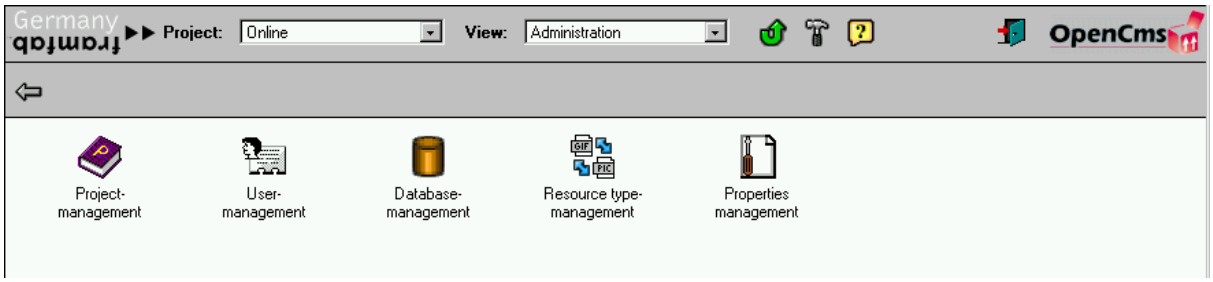


Fig. 5: "Administration" view

Click on "Project Management." A new page is opened that contains the following buttons (Fig. 6):

Fig. 6: Project Management buttons

Click on "New Project" to create a new project.

The dialog window "Create a new project" is opened (Fig. 7). Enter the project data:

Project name: Nice try
Description: Create test project
Directories: /examples/
Project members: Users
Project leader: Project manager

Click on the "OK" button.

NOTE: Clicking on the folder icon next to the "Directories" field opens a second window that contains a list of the existing directories. Select the directory "examples" for your new project. The window closes automatically.

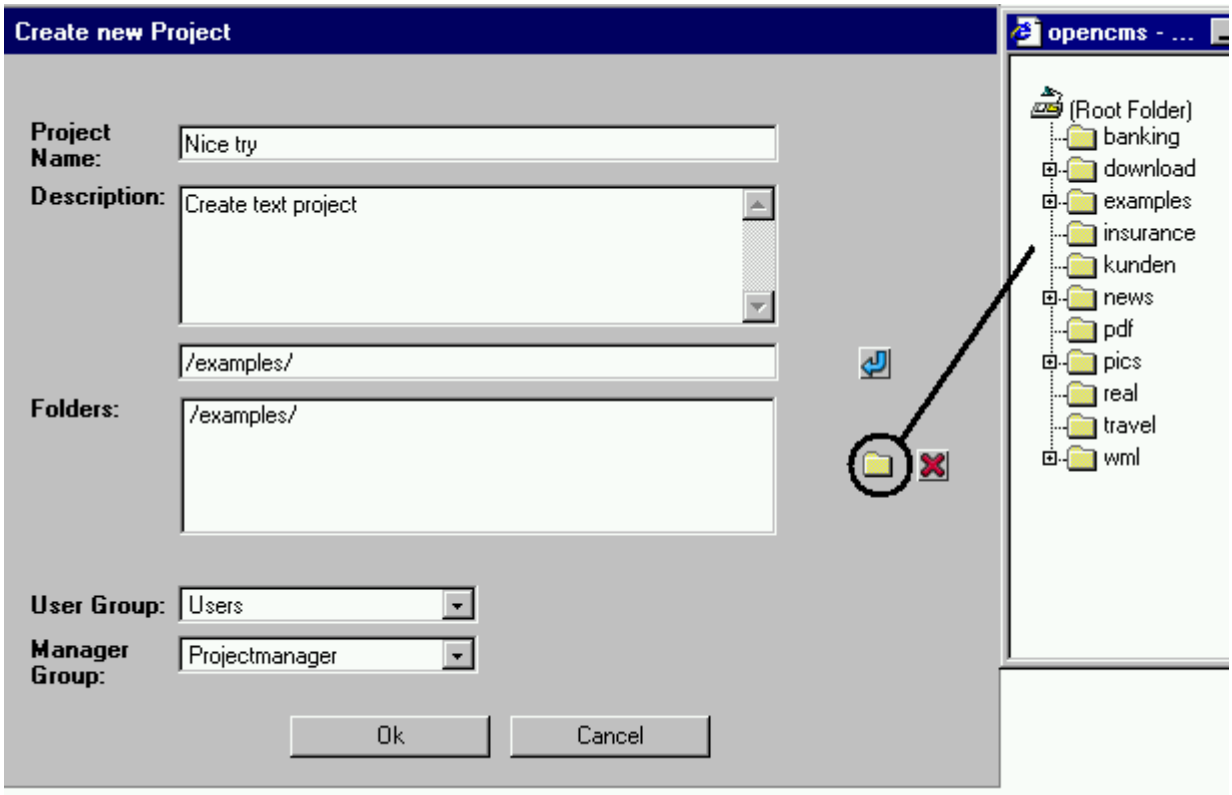


Fig. 7: Dialog window "Create a new project"

Switch back to the Explorer view by selecting it from the "View" drop-down menu. Select the "examples" directory (the same one you selected when creating your project) from the drop-down menu. The Explorer view is opened. Open your "Nice try" project by selecting it from the Project drop-down menu on the menu bar (Fig. 8).

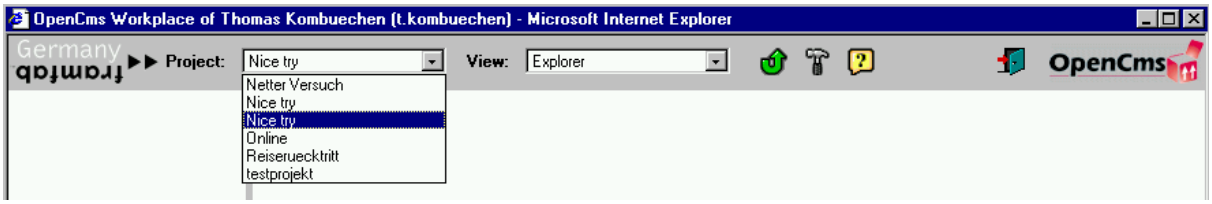


Fig. 8: "Project" view

The view for your project is open. You can now edit any one of its pages.

NOTE: You have surely noticed that all of the folders in the folder tree are inactive except for "examples" and "content." Once the project is selected, OpenCms only allows you to modify files in your project directory.

2.1.3 Editing pages

A page must be locked for all other users before it can be opened. Click on the icon next to the text "index.html" with the left mouse button to display the

context-sensitive menu (Fig. 9). Click on the menu item "Lock."

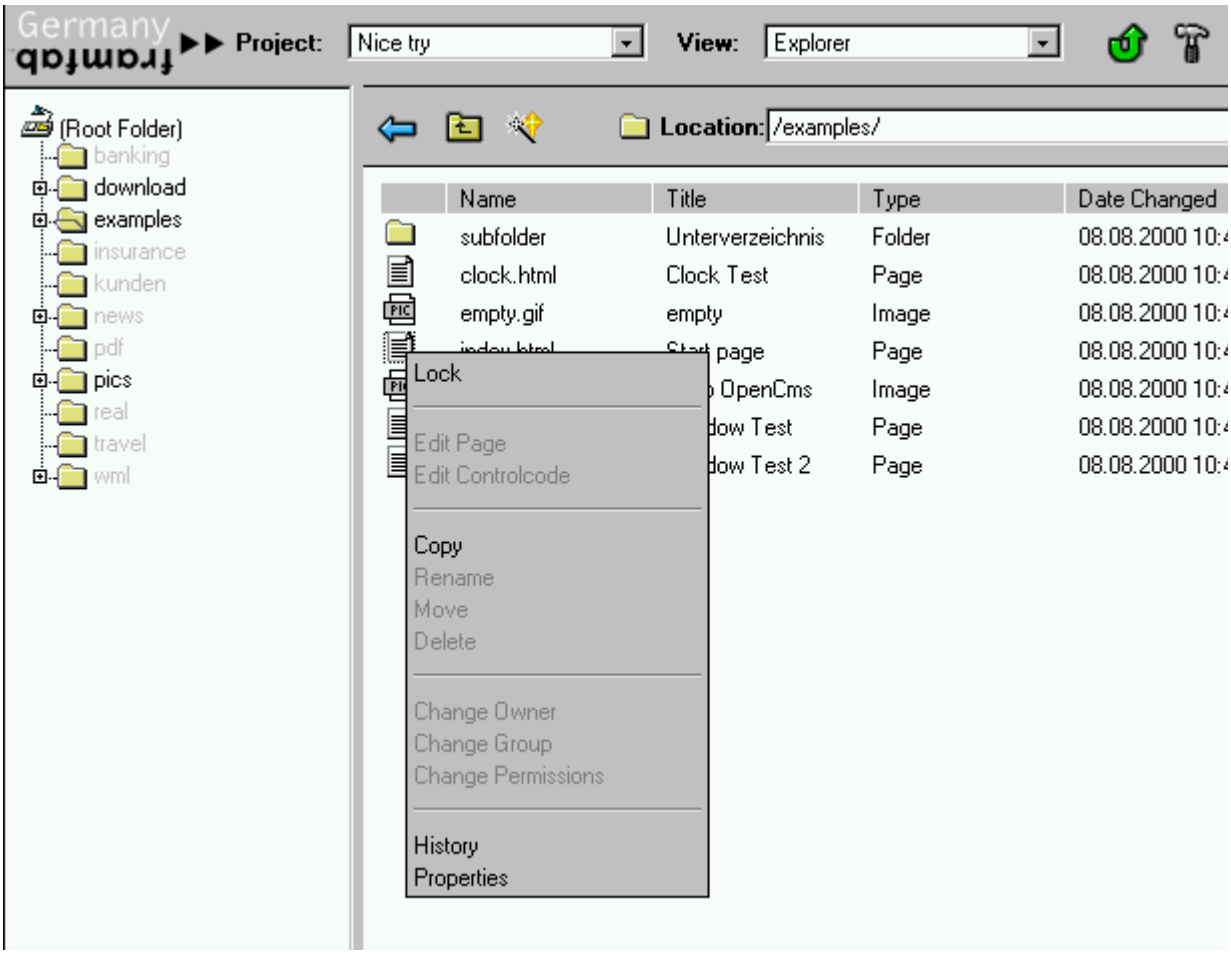


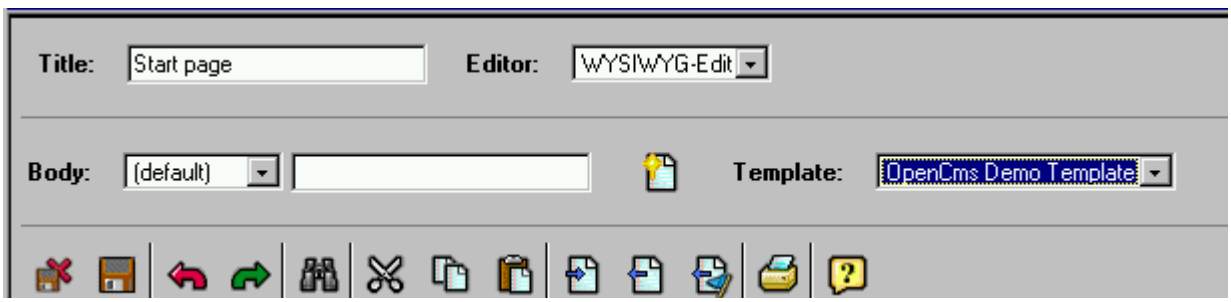
Fig. 9: Context-sensitive menu

An open lock is displayed next to your locked file. Should the icon not appear, check your browser settings (see above) or refresh the view with the button.

Click on the icon next to the text "index.html" with the left mouse button again to display the context-sensitive menu. Click on "Edit page" to open the HTML editor.

2.1.4 Working with the HTML editor

You are now in the OpenCms HTML editor (Fig. 10). Here you will find a number of editing icons that should be familiar from other applications, such as Word.



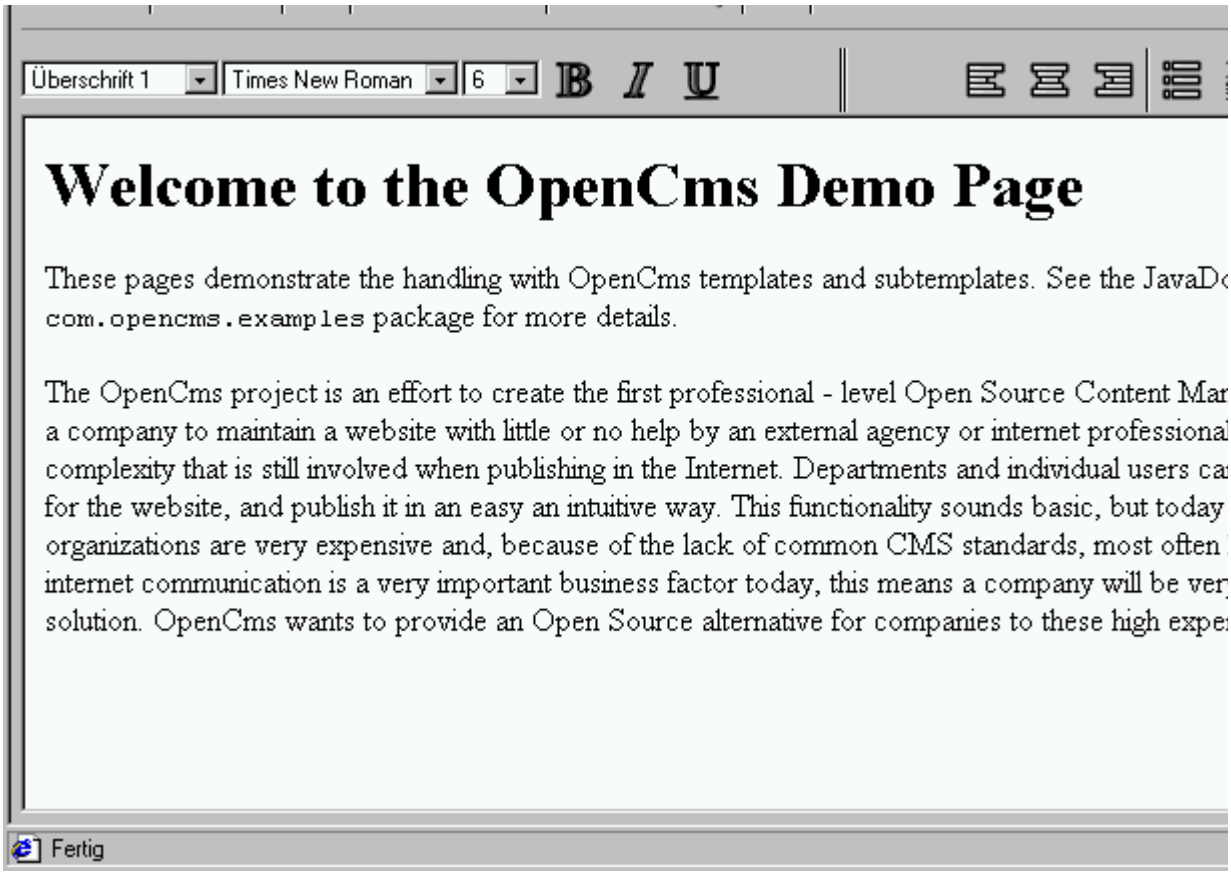

Überschrift 1
Times New Roman
6
Welcome to the OpenCms Demo Page
These pages demonstrate the handling with OpenCms templates and subtemplates. See the JavaDo
com.opencms.examples package for more details.
The OpenCms project is an effort to create the first professional - level Open Source Content Mar
a company to maintain a website with little or no help by an external agency or internet professiona
complexity that is still involved when publishing in the Internet. Departments and individual users ca
for the website, and publish it in an easy an intuitive way. This functionality sounds basic, but today
organizations are very expensive and, because of the lack of common CMS standards, most often
internet communication is a very important business factor today, this means a company will be ver
solution. OpenCms wants to provide an Open Source alternative for companies to these high expe
Fertig

Fig. 10: OpenCms HTML editor

In the text editor, which is just below the icons, the text that you saw at the beginning of the demo (Fig. 1) is displayed. Make changes to the text and its format (bold, italics, underline).

By the way: The HTML editor view you are currently in is a WYSIWYG view ("**W**hat **y**ou **s**ee **i**s **w**hat **y**ou **g**et"); this means that pages are displayed here exactly as they will be seen later on the Internet.

The "Template" drop-down menu is on the right part of the menu bar (Fig. 11). Select one of the pre-defined page structures and layouts, which are also immediately displayed in the OpenCms HTML editor.

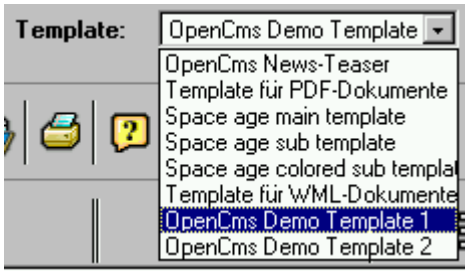


Fig. 11: Drop-down menu "Template"

Select "OpenCms Demo Template 1" from the drop-down menu. An Editor view is opened and the page layout defined in the Demo Template 1 is displayed. A bit more to the right of the menu bar is the "Editor" drop-down menu, which contains a selection of Editor views. You are currently in the HTML view. Select the "Text editor" view. The view is opened and displays the same content as

source code. Close the view by clicking on the button "Save & Exit," which is at the far left of the menu bar.

The Explorer view is displayed.

2.1.5 Completing the editing phase

Click on the icon next to the text "index.html" of the page you just edited with the left mouse to "unlock" it. The page's details are currently displayed in red, which means that the page has been edited. Click on the menu item "Unlock" in the context-sensitive menu to unlock the page. The lock disappears (Fig. 12).

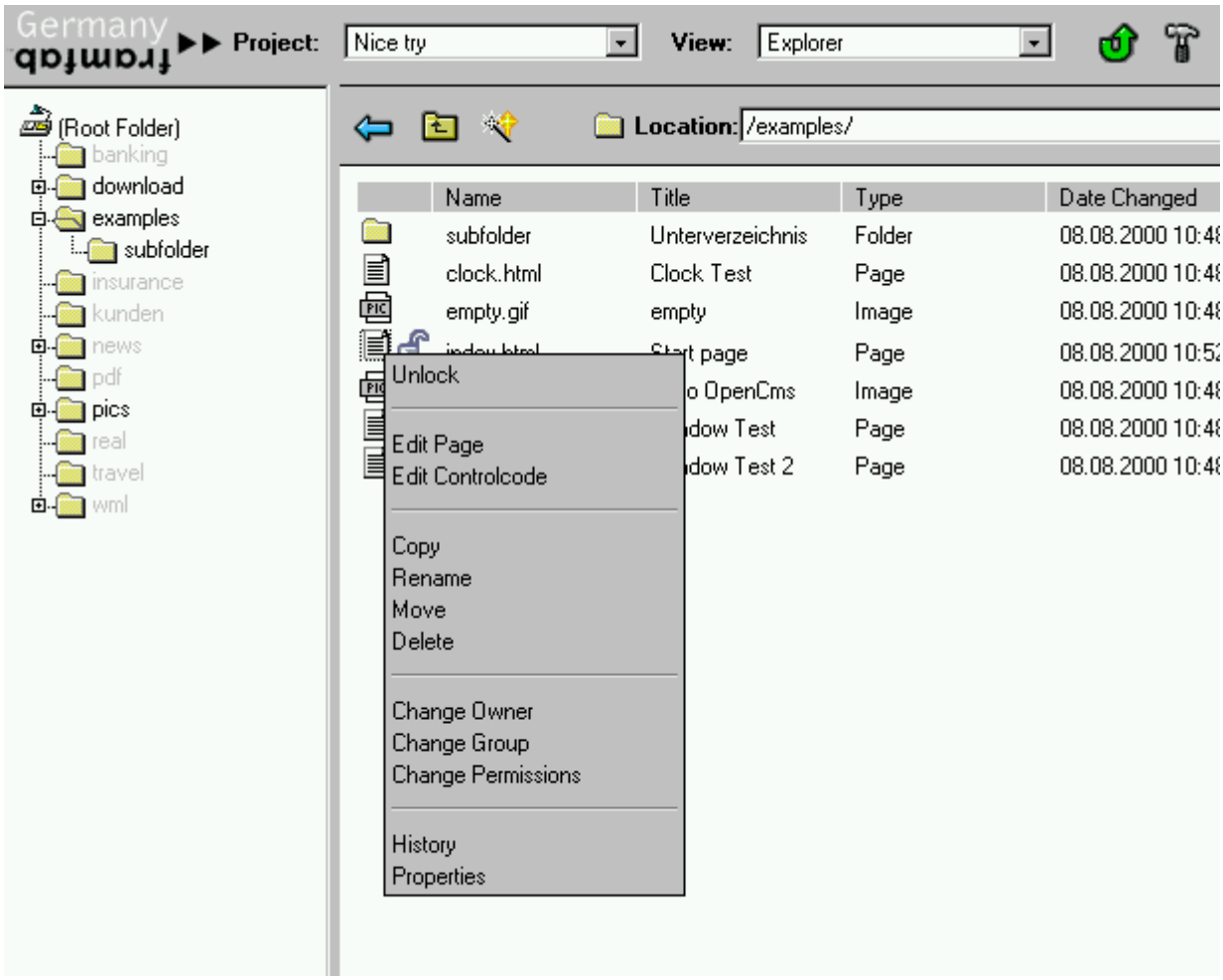


Fig. 12: Unlock an editing page

2.1.6 Publishing a project

Open the "Administration" view. Click on the "Project management" button and then on "Current projects." The project you just edited is displayed in the overview. Click on the project's icon to access the context-sensitive menu. Select the menu item "Publish" (Fig. 13). Click on "OK."

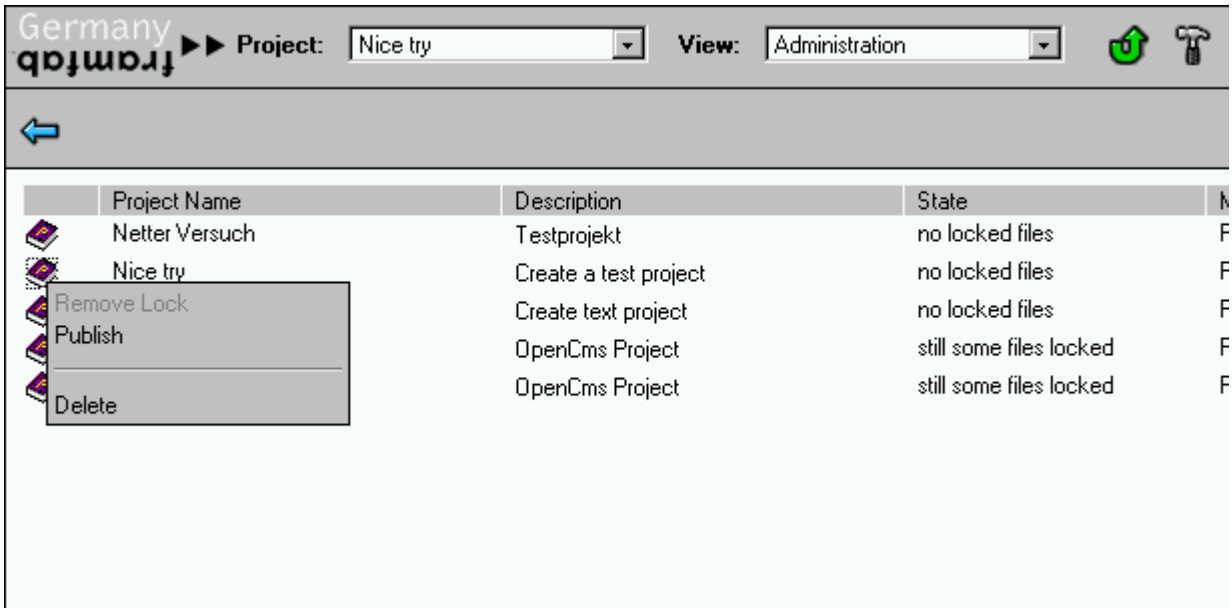


Fig. 13: Publishing a project

Start the demo application again: http://localhost/servlets/opencms/examples/index.html The test page is displayed with your modifications (Fig. 14).

OpenCms examples template
back
Clock Test
Window Test
Window Test 2
Unterverzeichnis
Welcome to the OpenCms Demo Page
These pages demonstrate the handling with OpenCms templates and subtemplates. See the JavaDocs of the classes in the
more details.
The OpenCms project is an effort to create the first professional - level Open Source Content Management System (CMS).
website with little or no help by an external agency or internet professional. To achieve this, OpenCms hides the complexity
Internet. Departments and individual users can thus concentrate on creating the content for the website, and publish it in a
sounds basic, but today software solutions for companies or organizations are very expensive and, because of the lack of c
proprietary. Considered that the internet communication is a very important business factor today, this means a company w
their CMS solution. OpenCms wants to provide an Open Source alternative for companies to these high expensive and prop

Fig. 14: Modified demo page

2.2 Creating a new page

You can add new pages and folders for your web page from the Explorer view. Create a new project by following the steps described above. Go to the "examples" directory by clicking on the appropriate folder in the directory tree with the left mouse button. Click on the icon. The dialog window "New" is opened (Fig. 15). Click on the radio button "Page."

Fig. 15: Dialog window "New"

Click on the "Continue" button. Enter the following data in the dialog window "Create a new page" (Fig. 16):

Name: help
Title: Test page
Template: OpenCms Demo Template 1
Navigator test: Help
Insert after: at the end

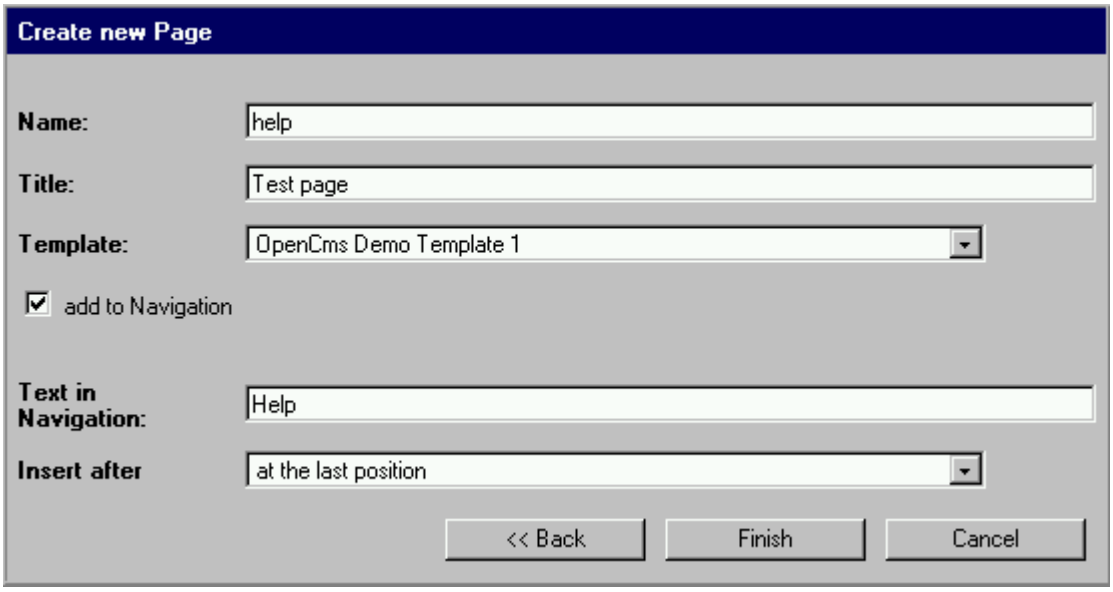


Fig. 16: Dialog window "Create a new page"

NOTE: The "Navigation text" is the name that will later be displayed as the link in the online navigator.

Click on "Complete." This takes you back to the Explorer view and displays the details your new page in blue with a lock (Fig. 17). You can either continue editing the page (see above) or use the context-sensitive menu to unlock it for other users.

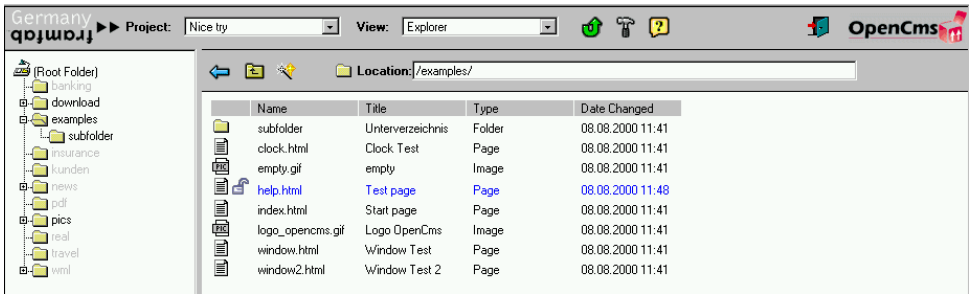


Fig. 17: Explorer view with new page

Publish the project as explained under 2.1.6 and open the demo application: http://localhost/servlets/opencms/examples/index.html

The demo page is displayed with the new link. Click on the link to view your new page (Fig. 18).

Fig. 18: Demo page with new link

This is the end of our demo. Thank you for your attention. Additional and more detailed information about OpenCms is described in Part 2 of the guide.

3 Part 2: OpenCms - The mechanics

3.1 The user interface

The user interface is customized by clicking on the "Settings" tab (the button on the menu bar):

- The additional file information that is to be displayed in the Explorer view is defined on the **"Explorer"** tab.
- The Standard view and messaging options for task management are defined on the **"Tasks"** tab.
- The user's default startup settings and permissions for new files are defined on the **"Startup Options"** tab.
- A user's group and password are changed on the **"User Data"** tab.

3.2 View Modes

The **user screen** contains all of the components, grouped in views, that enable users to create, maintain and manage web pages. In the **"Explorer"** view, users manage directories and files and edit HTML pages. A project's workflow is managed in the "Tasks" view. Users, groups, projects, database connections, images, documents etc. are managed in the **"Administration"** view. The user screen (default startup view) is started via a login dialog and is displayed as a file explorer. The directory tree structure, the file view and the menu bar make it easy for users to access files and functions (Fig. 19) :

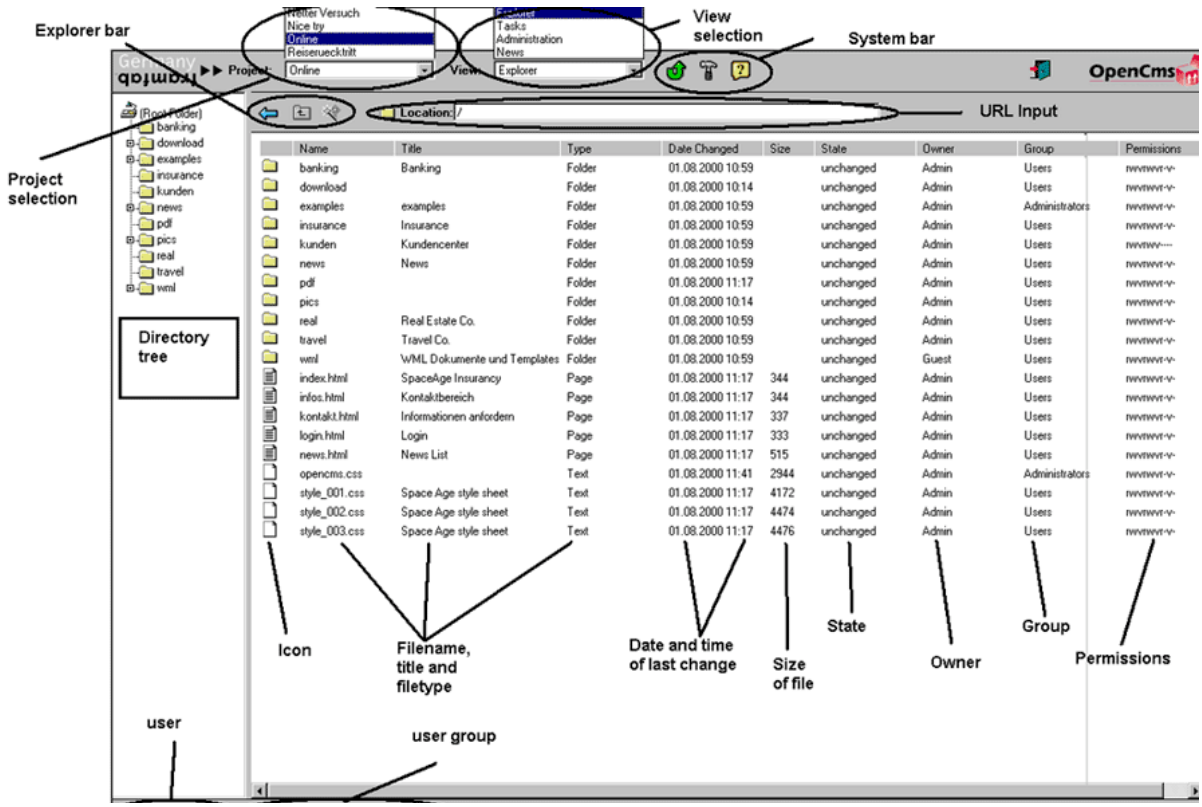


Fig. 19: User screen

Users can switch between the online version of the web page and the individual projects by selecting one of the options in the **"Project"** drop-down menu.

Users can switch between the "Explorer," "Tasks" and "Administration" views by selecting one of the options in the **"View"** drop-down menu.

The files and directories are managed via a context-sensitive menu that is activated by clicking on the file or directory icon in the file overview.

The content of the web site as it will be seen online is displayed in the **browser screen** (Fig. 20). The web site's files and directories cannot be modified in the online version. The browser screen, which displays the page as it would be seen by someone visiting the live site, is activated by clicking on the file name in the file view:

- The Template of an OpenCms-generated browser page contains the static and dynamic navigation components as well as other dynamic components such as logos or text fields that can be freely defined. The template determines the page's layout.
- The content is displayed in the Body. Content is freely defined. Its layout is based on previously defined format templates. The format templates, which are defined in the CSS file, ensure that the content is uniformly displayed.

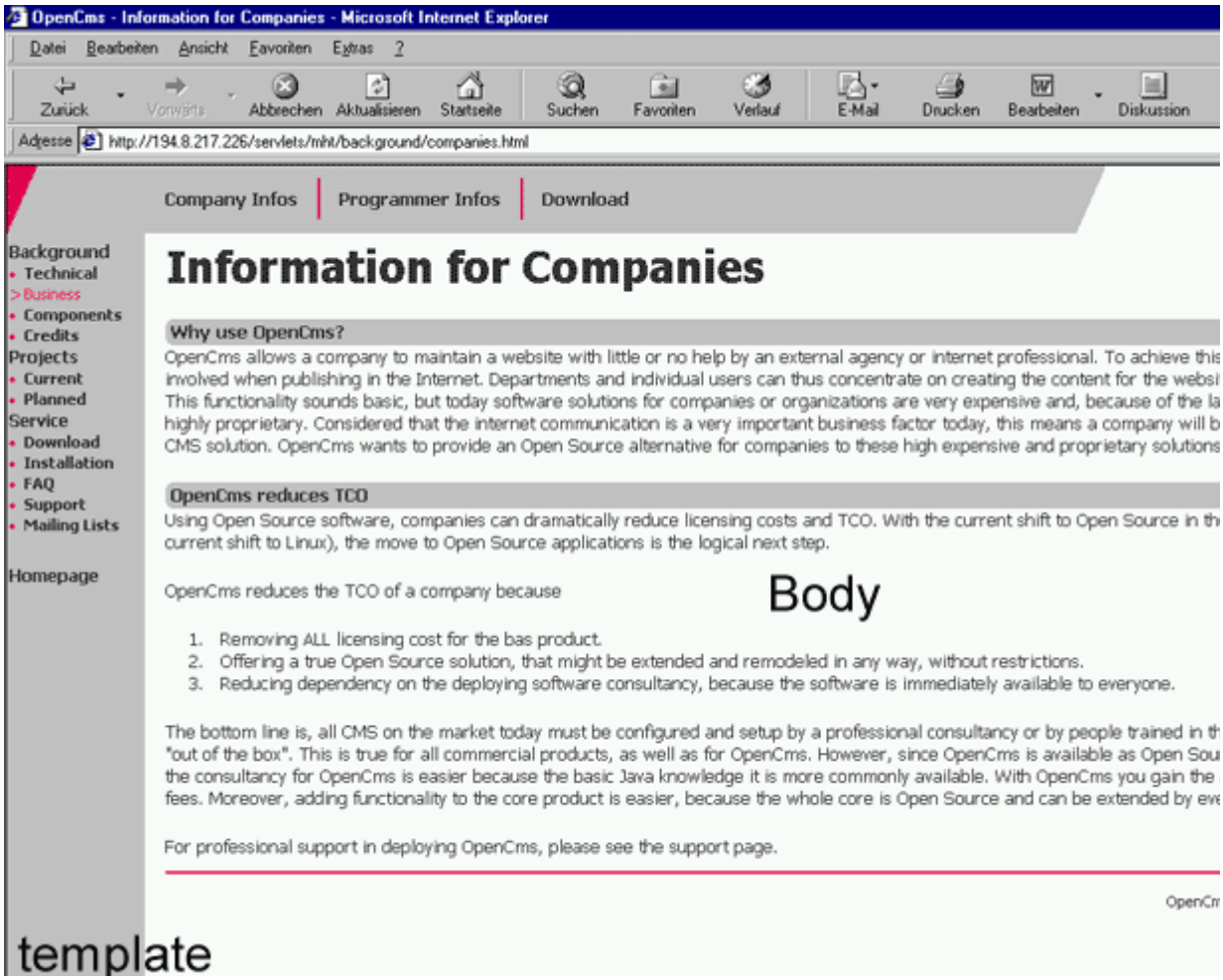

OpenCms - Information for Companies - Microsoft Internet Explorer
Datei Bearbeiten Ansicht Favoriten Extras ?
Zurück Vorwärts Abbrechen Aktualisieren Startseite Suchen Favoriten Verlauf E-Mail Drucken Bearbeiten Diskussion
Adresse http://194.8.217.226/servlets/mht/background/companies.html
Company Infos
Programmer Infos
Download
Background
Technical
Business
Components
Credits
Projects
Current
Planned
Service
Download
Installation
FAQ
Support
Mailing Lists
Homepage
Information for Companies
Why use OpenCms?
OpenCms allows a company to maintain a website with little or no help by an external agency or internet professional. To achieve this
involved when publishing in the Internet. Departments and individual users can thus concentrate on creating the content for the websi
This functionality sounds basic, but today software solutions for companies or organizations are very expensive and, because of the la
highly proprietary. Considered that the internet communication is a very important business factor today, this means a company will b
CMS solution. OpenCms wants to provide an Open Source alternative for companies to these high expensive and proprietary solutions
OpenCms reduces TCO
Using Open Source software, companies can dramatically reduce licensing costs and TCO. With the current shift to Open Source in th
current shift to Linux), the move to Open Source applications is the logical next step.
OpenCms reduces the TCO of a company because
Body
1. Removing ALL licensing cost for the bas product.
2. Offering a true Open Source solution, that might be extended and remodeled in any way, without restrictions.
3. Reducing dependency on the deploying software consultancy, because the software is immediately available to everyone.
The bottom line is, all CMS on the market today must be configured and setup by a professional consultancy or by people trained in th
"out of the box". This is true for all commercial products, as well as for OpenCms. However, since OpenCms is available as Open Sou
the consultancy for OpenCms is easier because the basic Java knowledge it is more commonly available. With OpenCms you gain the
fees. Moreover, adding functionality to the core product is easier, because the whole core is Open Source and can be extended by ev
For professional support in deploying OpenCms, please see the support page.
template

Fig. 20: Browser screen

3.3 Working on a project

An offline project is created by a user that belongs to the "Project manager" group. The project can be created for an existing web site that needs updating or a brand new web site.

The online version's files and directories are automatically copied to an offline project that is created for an existing web site. The copies remain on the system for traceability purposes after the modified pages have been published.

By default, an offline project's files and directories can only be modified by the project members. Responsibilities are clearly defined by assigning specific users and groups to specific files and directories. It is also possible to process part of the web site in different projects at the same time. Locking and unlocking functions ensure that access security remains intact for larger user groups. All of the modifications that are made to the files are written to a log file that can be accessed via the **"History"** option in the context-sensitive menu (Fig. 21).

Fig. 21: Project history

To create new content, the user creates a new file or directory by clicking on the "New" button on the menu bar. This opens a dialog window in which the user selects the element to create: "Folder," "Page," "Other" or "Load new file." The name, title and navigator text as well as the position of the file or directory in the navigator, are defined in separate dialog boxes. Selecting the option "Load new file" enables users to load files that are stored on their PC's local

hard disks into an OpenCms directory.

Users access their assigned directories and files via the file explorer. Clicking on the directory name (e.g. "OpenCms") in the directory tree structure or in the file view displays the directory's contents. Clicking on an HTML file name (e.g. "index.html") opens the file in the Internet browser.

Clicking on a directory or file icon (text file, image etc.) in the file overview displays a context-sensitive menu. The menu contains the following functions that are accessible (active/inactive) based on the file's or directory's status and the user's access permissions:

- Lock or Unlock: Directories or files can be locked throughout the editing phase to prevent them from being accessed or modified by several users at the same time. A file or directory is unlocked when the user has finished modifying it.
- Edit page: Clicking opens a WYSIWYG editor in which the file can be modified. At this stage, no HTML knowledge is required to modify a page.
- Edit control code: Clicking opens a text editor in which control codes can be edited. Extensive HTML knowledge is required to make modifications of this type.
- History: The history file displays all of the file's previous versions. The history file enables users to see who made which modifications when. All of the file's previous versions can also be displayed in the Internet browser.
- The respective access attributes for the individual files and directories are set on the system side by using the functions "Change owner," "Change group" and "Change permissions" .
- Standard functions such as "Copy," "Rename" and "Delete" can be selected from the context-sensitive menus.

3.4 Access permissions

On the user side, different access permissions determine which actions users can perform and which components they see, i.e. users see only those files and directories that are relevant to them. Doing this provides users with a well structured overview. Each user belongs to at least one user group, but can belong to several (Fig. 22).

The following groups are pre-defined in OpenCms:

- Administrator: An administrator has full access permissions to all of the files and directories. Administrators create and manage users and user groups.
- Project manager: A project manager creates new projects and coordinates their workflow. A project manager's access permissions are restricted to the projects he/she creates. A project manager can, however, access all of the files and directories within his/her projects. A project manager can also publish projects, i.e. put them online.
- User: A user can create new files and directories within the project he/she is assigned to. As the owner, the user has full access permissions to the files and directories he/she creates.
- Guest: This group consists of all other users, such as visitors.

Based on the requirements, additional groups such as editors, designers, testers etc. can be created.

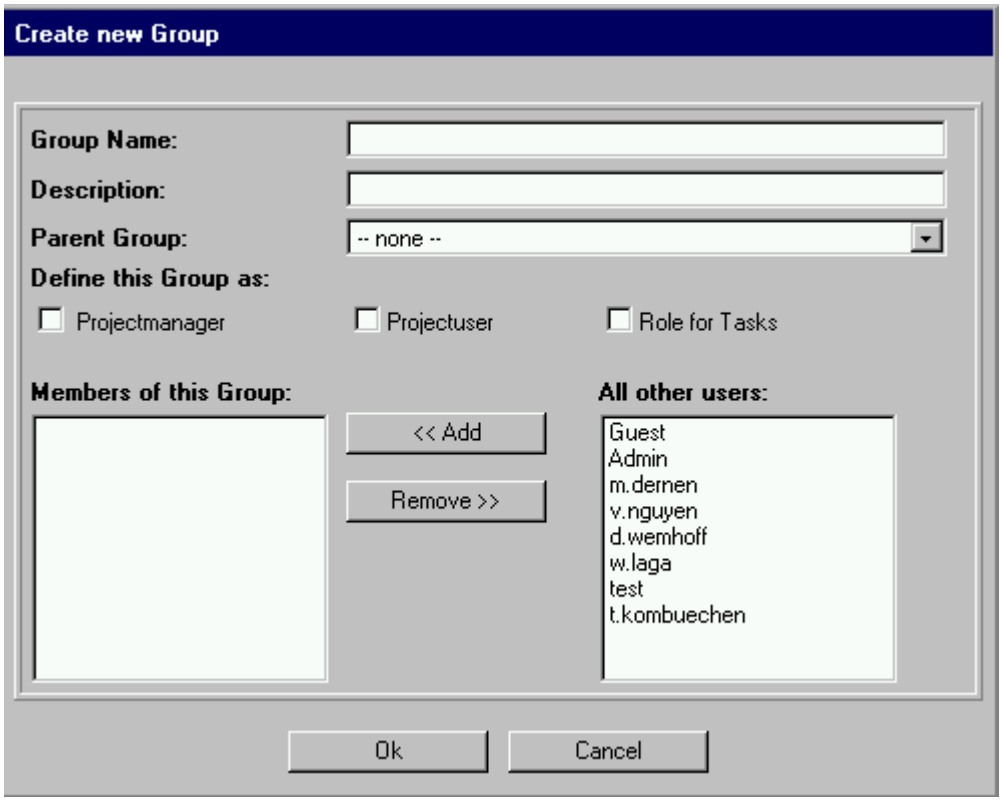


Fig. 22: Create a new group

On the system side, each file and each directory is assigned to one user, which by default, is the user that created the file or directory, making him/her its owner. Each file and each directory is also assigned to one user group that has specific access permissions. This enables the users in this group to access the files and directories that are relevant to them. File and/or directory attributes, such as the owner of a file or directory, or the group assigned to the files, can only be modified by the administrator and/or the file and/or directory owner. All access permissions are maintained via the "Change owner," "Change group" and "Change access permissions" options in the context-sensitive menu. File and directory access permissions are classified by "Owner permissions," Group permissions" and "Other permissions." A user's access permissions can be restricted to the files and directories that he/she owns. The following abbreviations are used to set a user's permissions:

r = read, w = write, v = visible, i = intern.

3.5 The editor

The editor is used to create content in the body, which is structured by a template that ensures that the layout for the navigator, the content and the individual pages - basically the layout for the whole site - is uniform (Fig. 23):

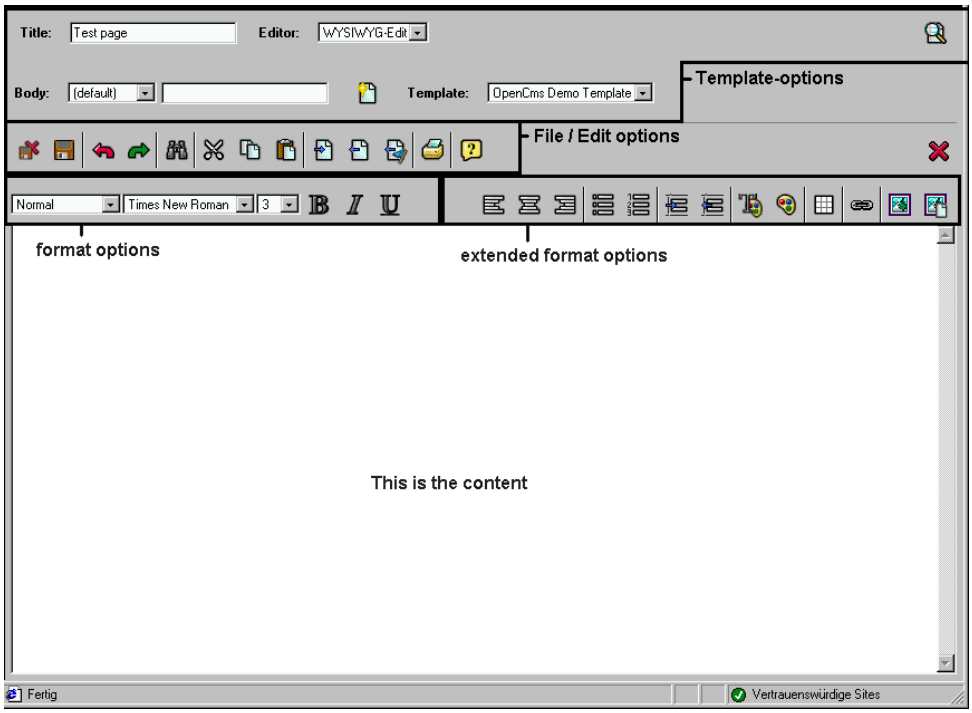


Fig.23: The HTML editor

The functionality of the OpenCms editor is very similar to that of a standard WYSIWYG HTML editor with templates, tables, preview functions, such as Netscape Composer. It is also possible to switch between source text and WYSIWYG mode. A page's layout is determined by a template. Complex layouts are created by cascading several templates. OpenCms is only used to edit the body.

3.6 Workflow

The project manager creates a new task and defines its role by clicking on the "New" button in the "Tasks" view. A role consists of several users that have the skills to perform a specific task such as editing, designing graphics, writing HTML code, etc. A preferred user is selected for each task. The name, the definition, the due date and the priority of the task as well as various messaging options are also defined. Depending on the selected messaging options, an e-mail is automatically sent to either the preferred user or all users that are assigned to a role as soon as a new task has been added to the project. The task is active once the appropriate user has accepted it. Optionally, the project manager receives an e-mail when the task has been accepted, rejected, forwarded or completed. Users can view the tasks that have been assigned to them as well as those they have forwarded to others by filtering on specific criteria in the drop-down menu "Filter" (Fig. 24). Different icons and colors are also used to define a project's status. A task that is still within the due date is shown in black. If the due date is exceeded, the task is shown in red. A completed task is shown in gray. A task's priority is defined by icons (low, normal and high). The task descriptions provide a clear overview of a user's task account.

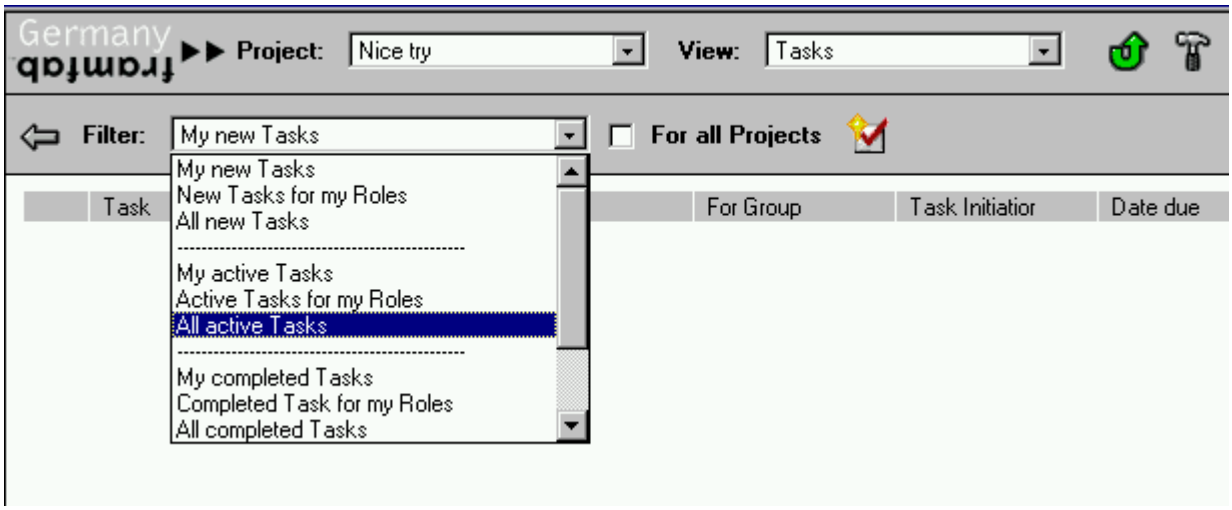


Fig. 24 "tasks" view

Clicking on the name of a new task displays its details and history. Each stage of the project is tracked and ensures that the workflow remains transparent.

Appendix 1: Browser settings

Remarks

During the development of OpenCms, we focused on the implementation of the server components. To save time during the development we decided to use existing components for specific client functions. This means that ActiceX components were used for the user editors. The controls (there are 2, one for the WYSIWYG editor and one for the source code editor) are freely available, i.e. are shareware. This, however, currently restricts the WYSIWYG editor to Microsoft's Internet Explorer. A thin version of Netscape Navigator is only available as source code editor. It would be possible to replace the ActiveX controls with Java applets. However, the OpenCms Team is currently not aware of an open source applet that could be plugged in. Should anyone know of an open source applet or have even written one that can be used as a WYSIWYG or source text editor, we would, of course, be more than happy to hear about it.

Configuring Microsoft Internet Explorer

On the menu bar, click on the menu item "View" and select "Internet options." Then do the following:

- On the tab "Security", select "Trusted site zones" from the drop-down menu and click on "Add Sites" to add the URL (e.g. http://opencms.mycompany.com - ask your system administrator for the exact URL) of the zone's OpenCms server. Deactivate the radio button "Require server verification (https:) for all sites in this zone."
- On the tab "Security", select "Trusted site zones" from the drop-down menu and click on "Settings". All ActiveX control elements must be set to "Enable." A note on security: It is safe to use ActiveX controls with these settings because the controls are executed by the OpenCms server only, and remain disabled for all other web sites.
- On the tab "General" go to the section "Temporary Internet Files" and click on "Settings." Select the option "Every visit to the page" (Check for a newer version of stored pages).

Cookies must be enabled.

Installing ActiveX controls

- The following ActiveX controls are used: Microsoft Dynamic HTML Editing Component and AY Software LeEdit OCX Control
- Please read the respective help files when you install the ActiveX controls.

Configuring Netscape Navigator

On the menu bar, click on the menu item "Edit" and select "Settings." Then do the following:

- On the tab "Settings" go to the section "Extended" and enable the options "Java" and "Java Script."
- On the tab "Settings" go to the section "Extended/Cache" and enable "Compare cache and network document: always."

Cookies must be enabled.